Claims

- [c1] 1. An interface apparatus with a rotational mechanism for connecting with an interface port in an electronic product, the interface apparatus comprising:

 a body selected from a group comprising a memory module or a memory adapter;

 a connector for connecting with an interface port; and a rotational mechanism for linking the body and the connector.
- [c2] 2. The interface apparatus of claim 1, wherein the memory module comprises a non-volatile memory module.
- [c3] 3. The interface apparatus of claim 1, wherein the connector comprises a universal serial bus (USB) interface.
- [c4] 4. The interface apparatus of claim 1, wherein the connector comprises an IEEE 1394 interface.
- [05] 5. The interface apparatus of claim 1, wherein the rotational mechanism has one to five degrees of freedom of movements.
- [06] 6. The interface apparatus of claim 1, wherein the rotational mechanism further comprises a rotational joint

having from one to five degrees of freedom of movements.

- [c7] 7. The interface apparatus of claim 6, wherein the rotational joint is selected from a group consisting of a rotational joint, a sliding joint, a rolling joint, a cam-wheel joint, a gear-wheel joint, a spiral joint, a cylindrical joint, a ball-and-socket joint and a plane-sliding joint.
- [08] 8. The interface apparatus of claim 1, wherein the rotational mechanism further comprises a plurality of rotational joints with each rotational joint having from one to five degrees of freedom of movements.
- [09] 9. The interface apparatus of claim 8, wherein each rotational joint is selected from a group consisting of a rotational joint, a sliding joint, a rolling joint, a cam-wheel joint, a gear-wheel joint, a spiral joint, a cylindrical joint, a ball-and-socket joint and a plane-sliding joint.